### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.15

# SOURCE INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** SIR-001306

Address: 333 Burma Road **Date Inspected:** 24-Sep-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Dao, Shangha

**Quality Control Contact:** William (Bill) Oak **Quality Control Present:** Yes No

**Material transfer:** Yes No N/A **Sampled Items:** Yes No N/A **Stock Transfer:** N/A OK to Cut: N/A Yes No Yes No **Rebar Test Witness:** N/A **Delayed/Cancelled:** N/A Yes No Yes No

Other: Coatings Inspection

**Bridge No:** 34-0006 Cross Beam #1, Cross Beam #2, Lift 2 West, **Component:** 

**Bid Item:** Lot No: 77, 78, 79 B265

## **Summary of Items Observed:**

n this date Caltrans Office of Structural Materials (OSM) Quality Assurance (QA) NACE III coating inspector, Mr. James Lumley arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island in Shanghai, China. The purpose of the coating inspections are to monitor the surface preparation and coating applications for the SAS Bay Bridge project. This QA NACE III coating inspector observed the following: Cross Beam #2

Final inspection was performed with Caltrans QA Lumley Caltrans Engineer Bill Howe and ABF QA Bill Oak on the external Interfine 979 top-coated surfaces. All external areas including repaired areas of damaged coatings exhibited good spectral reflectance and uniform appearance and were in general compliance by Caltrans Engineer Bill Howe. Some minor localized areas of excess Dry Film Thickness(DFT) were discovered on the bottom plate and along the vertical repaired area above 400um.

#### Cross Beam #1

Internal surfaces were in process of repairs consisting of application of Skia-flex 221 caulking as directed by ABF to crevice areas and backsides of cope holes. Also minor touch up and bolt holes were in process of Interzinc 52 application.

#### Lift 2 West

Cross beam terminus and vertical FL-3 beams were re-abrasive blasted to base metal and an SSPC SP-10 condition and Interzinc 22 re-applied. Minor grinding and re-blasting occurred prior to application. Profile amplitude was 76-82um.

#### Lift 4 West

Repairs to damaged internal previously undercoated surfaces and undercoated rust stained surfaces were performed via abrasive blasting. Caltrans QA Lumley rejected blasted surfaces due to unsatisfactory abrasive blast

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and visible rust evident. Areas were previously blasted and subjected to unsatisfactory ambient conditions and "Rustback" occurred on the internal floor area "T" stiffeners and floors of the Bottom Plate and East and West Side Plates, re-work required prior to re-application of Interzinc 22 undercoat.

Note: All inspections were performed jointly with ABF & ZPMC QA/QC representatives and Caltrans QA Lumley when achievable. International Protective Coatings technical service representative were available for inspections and consultation.

### **Summary of Conversations:**

Caltrans QA Lumley inquired with ABF QA Bill Oak as to why ZPMC personnel were performing abrasive blasting in assembly area during rain without employing environmental controls and tarpaulins in accordance with approved PQWP.

## **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang. (858) 699-9549, who represents the Office of Structural Materials for your project.

Inspected By:	Lumley,James	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer